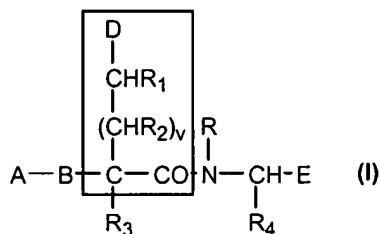


Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the above-referenced application.

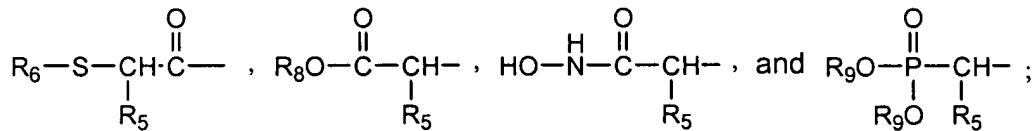
Listing of Claims:

1. (Previously presented) A compound of Formula (I), or a pharmaceutically acceptable salt thereof:

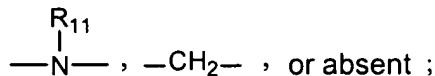


wherein:

A is a zinc ligand or zinc ligand bearing moiety selected from the group consisting of:



B is



R is hydrogen or lower alkyl;

R₁ is hydrogen or lower alkyl;

R₂ is hydrogen, or lower alkyl;

R₃ is hydrogen or lower alkyl;

R₄ is lower alkyl, substituted lower alkyl, cycloalkyl-(CH₂)_w-, aryl-(CH₂)_w-, substituted aryl-(CH₂)_w- or heteroaryl-(CH₂)_w;

R_5 is hydrogen, lower alkyl, substituted lower alkyl, cycloalkyl- $(CH_2)_x$ -, aryl- $(CH_2)_x$ -, substituted aryl- $(CH_2)_x$ -, or heteroaryl- $(CH_2)_x$;

R_6 is hydrogen;

R₈ and R₉ are hydrogen;

R₁₁ is hydrogen or lower alkyl;

D is -COOH;

E is hydrogen, -COOH, -CONH₂, -CONH(lower alkyl), -CON(lower alkyl)₂, -CO-NH(CH)CH₂OHCOOH, -CH₂COOH, CH₂OH, -CH₂CH₂OH, or -COOR₁₆;

R₁₆ is as previously defined for R₈ and R₉;

C is carbon;

H is hydrogen;

O is oxygen;

N is nitrogen;

S is sulfur;

P is phosphorus;

v is zero or one;

w is zero or an integer ranging from 1 to 4; and

x is an integer ranging from 0 to 4;

with the provisos that when "A" is R₈O(CO)CHR₅-, R, R₁, R₃, R₅ and E are H, B is absent, D is -COOH, v is 0, and R₄ is naphthyl; that when "A" is HO-NHCOCHR₅-, R₄ may not be carboxymethyl [-CH₂COOH]; and that when "A" is (R₉O)₂POCHR₅-, R, R₁, R₃ and R₉ are H, R₄ is 3-indolylmethyl, R₅ is 2-phenylethyl, B is NH, D and E are -COOH and v is 0.

2. (Previously presented) The compound as defined in claim 1, which is:

N-[1-Carboxy-2-(1H-indol-3-yl)-ethyl]-3-(2-mercaptop-acetylamino)- succinamic acid;

N-[1-Carboxy-2-(1H-indol-3-yl)-ethyl]-3-(2-mercaptop-3-phenyl-propionyl amino)-succinamic acid;

N-[1-Carboxy-2-(1H-indol-3-yl)-ethyl]-3-(2-mercaptop-propionylamino)-succinamic acid;

N-[1-Carboxy-2-(1H-indol-3-yl)-ethyl]-3-(2-mercaptop-4-methyl-pentanoylamino)-succinamic acid;

N-[1-Carboxy-2-(1H-indol-3-yl)-ethyl]-3-(2-mercaptop-3-methyl-butyrylamino)-succinamic acid;

N-[1-Carboxy-2-(1H-indol-3-yl)-ethyl]-3-(3-hydroxy-2-mercaptop-propionylamino)-succinamic acid;

N-[1-Carboxy-2-(1*H*-indol-3-yl)-ethyl]-3-(3-hydroxy-2-mercaptopro-*butyrylamino*)-succinamic acid;

N-[1-Carboxy-2-(1*H*-indol-3-yl)-ethyl]-3-(2-mercaptopro-hexanoylamino)-succinamic acid;

N-[1-Carboxy-2-(1*H*-indol-3-yl)-ethyl]-3-(2-mercaptopro-4-phenylbutyrylamino)-succinamic acid;

N-[1-Carboxy-2-(1*H*-indol-3-yl)-ethyl]-3-(2-mercaptopro-2-phenyl-acetylaminio)-succinamic acid;

3-(3-Biphenyl-4-yl-2-mercaptopro-propionylamino)-*N*-[1-Carboxy-2-(1*H*-indol-3-yl)-ethyl]-succinamic acid;

3-(3-(4-Benzyl-oxo-phenyl)-2-mercaptopro-propionylamino)-*N*-[1-Carboxy-2-(1*H*-indol-3-yl)-ethyl]-succinamic acid;

N-[1-Carboxy-2-(1*H*-indol-3-yl)-ethyl]-3-[3-(4-fluoro-phenyl)-2-mercaptopro-propionylamino]-succinamic acid;

N-[1-Carboxy-2-(1*H*-indol-3-yl)-ethyl]-3-[2-mercaptopro-3-(4-methoxy-phenyl)-propionylamino]-succinamic acid;

N-[1-Carboxy-2-(1*H*-indol-3-yl)-ethyl]-3-(3-cyclohexyl-2-mercaptopro-propionylamino)-succinamic acid;

N-[1-Carboxy-2-(1*H*-indol-3-yl)-ethyl]-3-[3-(1*H*-indol-3-yl)-2-mercaptopro-propionylamino]-succinamic acid;

N-[1-Carboxy-2-(1*H*-indol-3-yl)-ethyl]-3-(2-mercaptopro-3-naphthalen-2-yl-propionylamino)-succinamic acid;

N-(1-Carboxy-2-naphthalen-2-yl-ethyl)-3-(2-mercaptopro-3-phenylpropionylamino)-succinamic acid;

N-(1-Carboxy-2-hydroxy-ethyl)-3-(2-mercaptopro-3-phenyl-propionylamino)-succinamic acid;

N-[1-Carboxy-2-(4-hydroxy-phenyl)-ethyl]-3-(2-mercaptopro-3-phenyl-propionylamino)-succinamic acid;

N-[1-Carboxy-2-phenyl-ethyl]-3-(2-mercaptopro-3-phenyl-propionylamino)-succinamic acid;

N-(2-Biphenyl-4-yl-1-Carboxy-ethyl)-3-(2-mercaptopro-3-phenyl-propionylamino)-succinamic acid;

N-(1-Benzyl-2-hydroxy-ethyl)-3-(2-mercaptopro-3-phenyl-propionylamino)-succinamic acid;

N-[1-Carboxy-2-(1*H*-indol-3-yl)-ethyl]-3-(2-mercaptopro-3-phenyl-propionylamino)-succinamic acid;

4-[1-Carboxy-2-(1*H*-indol-3-yl)-ethylcarbamoyl]-4-(2-mercaptop-3-phenyl-propionylamino)-ethyl]-butyric acid;

N-[2-(1*H*-indol-3-yl)-methylcarbamoyl-ethyl]-3-(2-mercaptop-acetyl amino)-succinamic acid;

N-[1-(1-Carboxy-2-hydroxy-ethylcarbamoyl)-2-(1*H*-indol-3-yl)-ethyl]-3-(2-mercaptop-3-phenyl-propionylamino)-succinamic acid;

N-[2-(1*H*-indol-3-yl)-methoxycarbonyl-ethyl]-3-(2-mercaptop-acetyl amino)-succinamic acid;

N-[2-(1*H*-indol-3-yl)-ethyl]-3-(2-mercaptop-3-phenyl-propionylamino)-succinamic acid;

3-(2-Biphenyl-4-yl-ethylcarbamoyl)-4-hydroxycarbamoyl-butyric acid;

3-[2-(4'-Cyano-biphenyl-4-yl)-ethylcarbamoyl]-4-hydroxycarbamoyl-butyric acid;

4-Hydroxycarbamoyl-3-[2-(4-pyridin-2-yl-phenyl)-ethylcarbamoyl]-butyric acid;

4-Hydroxycarbamoyl-3-(4-phenyl-butylcarbamoyl)-butyric acid;

3-[2-(4'-Hydroxy-biphenyl-4-yl)-ethylcarbamoyl]-4-hydroxycarbamoyl-butyric acid;

3-(2,2-Diphenyl-ethylcarbamoyl)-4-hydroxycarbamoyl-butyric acid;

3-[2-(4'-Dimethylamino-biphenyl-4-yl)-ethylcarbamoyl]-4-hydroxycarbamoyl-butyric acid;

3-[(Biphenyl-4-ylmethyl)-carbamoyl]-4-hydroxycarbamoyl-butyric acid;

3-(2-Biphenyl-4-yl-ethylcarbamoyl)-5-hydroxycarbamoyl-pentanoic acid;

N-[1-carboxy-2-(1*H*-indol-3-yl)-ethyl]-3-(3-phenyl-1-phosphono-propylamino)-succinic acid; or

3-(2-Naphthalen-2-yl-ethylcarbamoyl)-pentanedioic acid.

3. (Previously presented) The compound of claim 2, which is 3-(2-Biphenyl-4-yl-ethylcarbamoyl)-4-hydroxycarbamoyl-butyric acid.

4. (Previously presented) A pharmaceutical composition comprising a therapeutically effective amount of a compound of any one of claims 1 to 3 and a physiologically acceptable carrier or excipient.

5. (Previously presented) A method for inhibiting PHEX comprising contacting PHEX with an inhibitory amount of a compound as recited in any one of claims 1 to 3.

6. (Previously presented) A method for stimulating bone mass formation in a mammal comprising inhibiting PHEX with an effective amount of a compound as recited in any one of claims 1 to 3.

7. (Previously presented) A method for treating or preventing a disease or condition associated with a phosphate metabolism defect comprising administering an effective amount of a compound as recited in any one of claims 1 to 3 to a mammal in need thereof.

8. (Previously presented) A method as recited in claim 7, wherein said disease or condition is selected from the group consisting of hyperphosphatemia, hyperparathyroidism and renal insufficiencies.

9. (Previously presented) A method for identifying PHEX substrates comprising
contacting a candidate with PHEX in the presence and in the absence of a compound as recited in any one of claims 1 to 3; and
assessing PHEX biological activity on the candidate in the presence and in the absence of the compound,
wherein the candidate compound is selected as a PHEX substrate when PHEX biological activity is measurably higher in the absence versus in the presence of the compound.

10-14. (Cancelled)